In the past decade, the City of Hampton has faced several hurricanes, nor'easters, or abnormally high tide cycles which have caused flood damage to public and private properties. These events negatively impact the quality of life for residents and businesses in Hampton due to the rising tidal waters along our Chesapeake Bay coastline. In fact, most of Hampton and its storm drainage facilities are affected by higher tides, particularly in the coastal areas of Grandview, Fox Hill, Buckroe, Phoebus, Downtown Hampton and Wythe, and along much of Newmarket Creek.

As a result of this apparently worsening tidal flooding, the City completed a study to determine the extent of the current and future flooding problems, to assess the impacts, and to determine what solutions are available to minimize property damage. That study, entitled the "Hampton Tidal Floodplain Study and Protection Plan," is available on the City's website and hardcopies are available for viewing in the Public Works Department at Hampton City Hall, and in the Hampton Public Libraries.

A summary of much of the information from that study is contained in this brochure, which concisely explains the "why, what and where" of tidal flooding in Hampton and provides practical solutions for you to better prepare for tidal flooding and perhaps reduce the cost of flood damage.

The City of Hampton Website contains great information on:

- · Areas prone to tidal flooding
- Registering if you have special needs
- What to do before a flood
- What you need to know about flood insurance
- · Protecting your home, business and boat
- · How to prepare an emergency kit
- · Location of area shelters
- What to do in an evacuation
- How to recover after a disaster

Please visit the Hampton Emergency
Management Office website @
www.Hampton.gov/eoc for these and other
important topics.

# Hampton and Tidal Flooding...

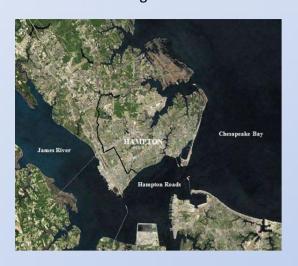
there are things we think you should know.

A CITIZEN'S GUIDE TO UNDERSTANDING SEA LEVEL RISE AND TIDAL FLOODING

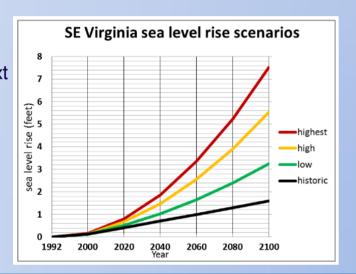


#### Understanding What Tidal Flooding Means to You

Tidal flooding in the lower lying areas of Hampton is inevitable due to proximity to the Chesapeake Bay and the Atlantic Ocean, as seen in the satellite image below.



Hampton, like the entire Atlantic coastline, is seeing a gradual increase in sea levels. What's causing sea levels to rise may be debated, but it is happening and no one can say with certainty how high it will rise in the future. The Virginia Institute of Marine Science (VIMS) has published a sea level rise projection as part of its Recurrent



Flooding Study, published in January 2013, which used information from the National Climate Assessment. The graph below depicts VIMS various sea level rise scenarios through the remainder of the century, with predictions in the year 2100 varying from 1.5 feet to as much as 7 feet above the sea level that existed in 1992. According to the VIMS study, "Given what is currently known, it seems reasonable to anticipate that sea level in Virginia will be 1.5 feet higher than it is presently sometime in the next 20 to 50 years."

The City of Hampton has developed a series of Hampton Tidal Flood Maps, which are available online, for use by our citizens and business

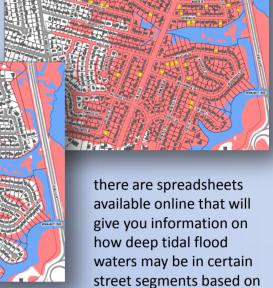
water will spread over land at various tidal heights above the current normal high tide. Using the maps, you can find your

owners to see how tidal 3' Above Normal High Tide Normal High Tide

home or business on a specific map sheet and see what tidal height above normal high tide your street, yard and house will be subject to tidal flooding. For example, below are the maps you could view if you lived in the Riverdale area or traveled along LaSalle Avenue.

And more importantly, if evacuation should be necessary, in addition to the tidal flood maps,

6' Above Normal High Tide



the predicted height of the

tide during a storm.

Note: The tidal flooding mapping information does not reflect the effects of storm surge or wave action, and the maps should be used for general reference only.

### PREPARING YOURSELF, YOUR FAMILY OR YOUR BUSINESS

#### **Prepare Your Property**

### Make a Disaster Kit

#### **Plan & Keep Informed**

There are various ways you can protect your property from tidal flood damage. For more detailed information go to the FEMA's website @ www.ready.gov/floods:

- ☐ Mark your fuse or breaker box to show the circuits serving floodable areas. Turning off the power to these areas before flooding can reduce property damage and save lives.
- ☐ Turn off the gas prior to major storms as well, to prevent fires if lines rupture.
- Consider elevating your home above flood levels. There are many variables in the cost to elevate: condition of your home, type of foundation, elevations of the 100-year flood, the ground, and lowest floor of your home, and other structural elements.
- You may also be able to elevate or protect individual components, such as your HVAC unit, ductwork, or plumbing.
- Check your structure for water entry points. These can be basement windows, doors, or dryer vents. These openings can be protected with low walls or temporary shields to be installed before flood events. Many of these retrofit projects can be performed in just a short week or weekend and at minimal cost

for supplies.

☐ Install a floor drain plug, standpipe, overhead sewer, or sewer backup valve to prevent sewer backup flooding.



During a major tidal flood event, be prepared to make it on your own for at least three days. It may take that long for FEMA or other first responders to reach you. The City of Hampton website provides information on stocking a Disaster Kit @ www.Hampton-kit.gov as does FEMA @ www.ready.gov/build-a-kit. Essentially, gather up:

- ☐ Toiletries & Personal Hygiene Items
- ☐ Water (1 gallon per person for 3 days)
- ☐ Food (3 -5 day supply of non—perishables)
- ☐ Manual can opener/paper plates/utensils
- ☐ Clothing (include rain gear & sturdy shoes)
- ☐ Blankets & pillows
- ☐ First Aid Kit
- ☐ Medication original bottles (7 days worth)
- Moist wipes
- ☐ Flashlight & extra batteries
- ☐ Battery-operated or hand-crank radio
- ☐ Cash/ID Cards
- ☐ Extra Set of Keys for house & car
- ☐ Important Documents in waterproof package
- ☐ Toys/books/entertainment
- ☐ Car charger (for cell phone)



FEMA's website has detailed information for making plans for a varied of people and situations @ www.ready.gov/make-a-plan. Essentially, create:

- ☐ A Communications Plan Consider how to communicate with your family members. Consider having each member call or text the same friend or relative to check-in.
- ☐ A "Shelter-in-Place" Plan Understand when circumstances require that you stay where you are and create a barrier between you and possible contamination or flooding.
- ☐ A "Get Away" Plan Plan how you will gather your family and where you will go. Choose several destinations in different directions so you have options depending on the emergency. Take your pets and your Disaster Kit with you when you leave.
- ☐ School and Work Plans Talk to your children's schools and your employer about emergency plans. Talk to your neighbors, so you can work together.

Most importantly, keep informed. Watch television, listen to the radio, check websites for official instructions as they may develop during an

emergency. Prepare to react in any type of emergency. Go to www.ready.gov to learn more or call 1.800.237.3239.

## The City of Hampton

Emergency Management
Office & Public Works

Working together with you to protect and prepare your home and property...

The City of Hampton has been working hard to understand the effects of sea level rise and tidal flooding, and to develop engineering solutions for reducing flood damage to public and private properties, as part of a citywide Tidal Floodplain Study. However, there is more work to be done to fully prepare for the threat of tidal flooding, in cooperation with local, regional, state and Federal agencies and the private sector. In the meantime, there are things we all can do to prepare for flooding or any other emergency that may arise.

Since the City's beginning, even before development began, Hampton experienced periodic flooding from two primary sources – higher than normal tides and storm water runoff from rainfall events. Because of its low lying elevations, much of the city is prone to periodic tidal flooding (particularly during hurricanes and nor'easters), with or without rainfall.

One of the things that makes Hampton so attractive to residents and businesses – access to our rivers and to the Chesapeake Bay – does present challenges when the tide rises into our yards, streets, and worse, our homes. However, when we all work together to prepare, we can enjoy the wonderful beaches and waterways for which Hampton is known.



